

AMERICAN DENDROBATID GROUP

Newsletter No. 9

May-June 1993

The purpose of the ADG is to develop better communication between Dendrobatid breeders in North America. It is designed by its format and bi-monthly distribution to keep dendrobatid frog breeders in better communication with one another. We hope that with this communication we will be able to solve some of the problems which confront us all. This newsletter will appear bimonthly and will cost \$5.00 annually to cover printing and mailing.

Subscriptions, comments, etc. should be sent to Charles Powell (2932 Sunburst Dr., San Jose, CA 95111 Tel.: (408) 363-0926) or Terry Chatterton (8007 Ridge Rd., Arvada, CO 80002 Tel.: (303) 340 7647).

EPIPIDOBATES TRICOLOR (BOULENGER, 1899)

Volker Ennenbach and Stacy Surla
The Serpent's Egg
1809 Irving St., NW
Washington, D. C. 20010

Epipedobates tricolor is the type for the genus *Epipedobates* recently described by Myers (1987) and was originally called *Prostherapis tricolor*. The type locality, that is the locality from which the frog was first described by Boulenger (1899), is Porvenir, Ecuador. It ranges from about 20 to 25 mm snout to vent length. *Epipedobates tricolor* is found west of the Andes Mountains from middle elevations (around 600 m) to highlands and cloud forests (elevation about 1,700 m). It is a 'cultural follower' as it adapts well and even thrives in cleared areas around plantations, grassy environs around small streams and in meadows kept wet by irrigation runoff. It is easy to maintain and is a relentless breeder in captivity.

Description: Five color variations of *E. tricolor* are described here from specimens collected from the Rio Girón Valley, the Rio Poyango drainage and the Rio Zapotal drainage, Ecuador.

Santa Isabel variety-This is the largest of the *E. tricolor* variations found. The habitat in which the frogs are found is around grasses or among bush and scrub around little rivers and springs at an elevation of about 1,700 m in the Rio Girón Valley near Santa Isabel. This variety has a ground color varying from orange-red to reddish-brown. The medial stripe is a creamy yellow-white and is always wide enough to be wider than the lighter white interstices between the stripes of the ground color. Most commonly the ground color is reduced to very thin stripes on the lower part of the dorsum, which gives the frogs a nearly solid yellow-white appearance. The ventrum is reddish-brown to brown with light blue spots and markings.

Girón Valley variety-This variation occurs in very moist secondary growth at low elevations about 25 miles west of Santa Isabel in the Girón Valley. It is a medium-sized variety ranging in length from about 22 to 24 mm. Its ground color is deep, bright red with narrow stripes which are usually mint-green, but can range to whitish-blue. The medial stripe is often interrupted and appears as a line of spots. A number of aberrant specimens have been noted which lack a medial stripe, one specimen lacked both medial and dorsolateral stripes and therefore had a solid red color with only two white spots on the upper eyelids.

Balsas variety-This is the smallest variety of true *E. tricolor* recognized here. It occurs in secondary and primary cloud forests at high elevations at Balsas in the Rio Poyango drainage. It has a dark brown (chocolate brown) ground color with relatively thin green dorsolateral and medial lines. Both this and the variety from Rio Zapotal share their habitat with other diurnal frogs from the genera *Eleutherodactylus* and *Colostethus*. They are relatively secretive and unlike other varieties immediately stop calling when approached.

Moraspunga variety-This broadly stripped variation occurs in secondary and primary cloud forests at high elevations near Moraspunga in the Rio Zapotal drainage. The lines are broad, solid and grass green in color while the background is a dark brown color. The ventrum has a "clown pattern" of alternating white and brown spots.

Lower Rio Girón variety-This form occurs in very moist secondary growth at low elevations in the Rio Girón Valley and cannot with certainty be assigned to *E. tricolor* as it may be *E. anthonyi*, but frankly we have been unable to distinguish these two species. The population was not included in the size range above as it is smaller than normal ranging in length from about 16 to 18 mm, they are reddish brown in ground color with light blue stripes or dots and orange flash marks. They call frequently throughout the day typically from an exposed and elevated place such as a log or large stone.

Care in captivity: *Epipedobates tricolor* can be satisfying additions to any collection because of their interesting colors, melodious call, hardiness, bold behavior and propensity to mate. Since clutch sizes are large for dendrobatids and tadpoles are easy to feed and not cannibalistic it is likely that the hobbyists will have the opportunity to observe the full range of this frog's life cycle. As with any dendrobatid the terrarium should have a permanent water area and be well planted. Bromeliads and other water-holding plants will provide places for the males to call and spawning sites for mated pairs.

Tadpole rearing theories vary from one breeder to the next. Some advocate removing eggs and culturing "by hand" while others allow all phases to take place in the terrarium. Whichever approach you take, be aware that newly metamorphosed froglets are fairly small, around 6 mm, and so will do best with small feeder insects, such as springtails, aphids or pinhead crickets, although they may also take small fruit flies. The froglets grow rapidly, however, and after a few weeks they will not have problems taking fruit flies or termites.

Dendrobatids bred in captivity do not exhibit all the characteristics shown in the wild. For instance, captive bred offspring do not produce skin toxins. It has also been noted that wild-born dendrobatids kept in captivity will eventually decrease toxicity over time. All *Epipedobates tricolor* breeders know that captive bred *tricolor* will have narrower

stripes and tend towards brown colors, regardless of the coloration of the parents. Possible explanation for this phenomena are diet, UV light levels, or other environmental triggers - but definitive proof of any of these hypotheses have yet to be made. Experimentation and information-sharing among breeders can certainly contribute to a broader understanding of these factors.

References

- Boulenger, G. A., 1899, Descriptions of new reptiles and batrachians collected by Mr. P. O. Simons in the Andes of Ecuador. Ann. Mag. Natur. Hist., Ser. 7, 4: 454-457
- Myers, C. W., 1987, New generic names for some neotropical poison frogs (Dendrobatidae). Pap. Avulsos Zool. (Sao Paulo), 36(25): 301-306.

Adds: For Sale

<i>Dendrobates truncatus</i>	\$50	Terry Chatterton 8007 Ridge Road Arvada, CO 80002
<i>Dendrobates auratus</i> 'Costa Rica'	\$25	Sean Healy 3140 Savage Rd. Sarasota, FL 34231
<i>Dendrobates anthonyi</i>	\$30	Sean Eric Malolepsy 5041 Van Buren Yorba Linda, CA
<i>Dendrobates anthonyi</i> CB juveniles \$30 each or \$25 each for 4 or more		Ed Oshaben 4154 Lincoln Ave. Willoughby, OH 44094
<i>Dendrobates leucomelas</i> CB juveniles \$45 each or \$40 each for 4 or more		
<i>Dendrobates pumilio</i> 'Costa Rica'	\$100/pair	Charles Powell 2932 Sunburst Dr. San Jose, CA 95111

Max Hernandez (36863 Ash St., Apt. C, Newark, CA 94560 Tel.: (510) 505-0580) has cork bark, grapewood vines, tree-fern fiber and various bromalids for sale. Call for prices.

The Serpent's Egg (1809 Irving St., NW, Washington, D.C. 20010 Tel. 202 462 9443) has various *Dendrobates pumilio*, *D. auratus* and a variable stock of other wild caught frogs for sale. Write or call for information.

Breeders Exchange

Dendrobates ventrimaculatus 'Y stripped phase'
(male needed)

Max Hernandez
36863 Ash St., Apt. C
Newark, CA 94560
(510) 505 0580

New Members

Leo Hoigné (Florida)
Kevin Izumi (Hawaii)

New Literature

Aichinger, Manfred, 1991, Tadpole transport in relation to rainfall, fecundity and body size in five species of poison-dart frogs from Amazonian Peru. *Amphibia-Reptilia*, 12: 49-55.

Daly, John W., Secunda, Sherrie I., Garraffo, H. Martin, Spande, Thomas F., Wisnieski, Anthony, Nishihira, Charles, and Cover, Jr., John F., 1992, Variability in alkaloid profiles in neotropical poison frogs (Dendrobatidae): genetic versus environmental determinants. *Toxicon*, 30(8): 997-898.

Ruiz-Carranza, Pedro M., and Ramirez-Pinilla, M. Patricia, 1992, Una nueva especie de *Minyobates* (Anura: Dendrobatidae) de Colombia. *Lorania*, 61: 1-16.

New Dendrobatid Species (additions to last issues list)

Dendrobates maculatus W. Peters, 1873
Panama

Minyobates virolinensis Ruiz-Carranza and Ramirez-Pinilla, 1992
Colombia